The Delay of Repair Obligations in 40 C.F.R. § 60.5397a(h)(2) Create Compliance Issues that Need to be Addressed Through Regulatory Revisions

Joint Submission by GPA & INGAA

Request: GPA Midstream and INGAA request that EPA revise the delay of repair requirement in 40 C.F.R. § 60.5397a(h)(2) to be consistent with their comments on the proposed rule and similar to the requirements that have been successfully implemented in Colorado. Specifically, GPA Midstream and INGAA suggest the following revisions:

> § 60.5397a(h)(2) *If the repair or replacement is technically infeasible, would require a vent blowdown, a compressor station shutdown, a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit, the repair or replacement must be completed during the next scheduled compressor station shutdown for maintenance, well shutdown, well shut-in, ~~after an unscheduled, planned or emergency vent blowdown~~ or within 2 years, whichever is earlier.*
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> *Delay of repair will be allowed beyond the next scheduled compressor station shutdown for maintenance if (a) replacement parts cannot be acquired before the next scheduled shutdown for maintenance or (b) the delay is attributable to other good cause that makes a sooner repair impracticable and/or would lead to excess emissions. The operator must document: the location and nature of the leak, the date the leak was added to the delay of repair list, the basis for delaying the repair, the date replacement parts were ordered, the vendor providing the parts, and the anticipated delivery date. Replacement parts must be promptly ordered after determining it is necessary to delay the repair and the repair must be completed within 30 business days of receipt of the replacement parts, during the next scheduled maintenance shutdown after the parts are received if the repair requires a shutdown, or within 30 business days after the cause of delay ceases to exist.*

Explanation/Background: The final NSPS OOOOa appropriately adopts an approach of allowing repairs of leaking components to be delayed for up to two years in certain circumstances. Delaying repairs in certain circumstances enables operators to reduce net emissions, ensure reliable delivery of natural gas to customers, and make repairs in a safe manner.

EPA's proposed delay of repair provisions would have required repair or replacement of leaking components after the next scheduled shutdown or within 6 months, whichever is earlier. 80 Fed. Reg. at 56,668. As GPA Midstream and INGAA explained in comments on the proposed rule, it is critical that EPA limit the circumstances under which operators must repair or replace components on such a time frame. Specifically, GPA Midstream urged EPA to limit repair or replacement to scheduled compressor station shutdowns. GPA Midstream Comments at 26. Likewise, INGAA noted a number of logistical challenges associated with repairing or replacing leaking components and urged EPA to limit repair or replacement to scheduled shutdowns. INGAA Comments at 14.

EPA did not adopt GPA Midstream and INGAA's proposed changes. Instead EPA expanded the triggering events for repairing or replacing leaking components to include vent blowdowns and

unscheduled and emergency compressor station shutdowns. This expansion of the triggering events creates significant uncertainty and compliance issues, will increase rather than decrease emissions attributable to repairing and replacing leaking components, and will threaten natural gas supply to end-use consumers. In light of these new requirements that were added in the Final Rule, GPA Midstream and INGAA are renewing their request that EPA revise the delay of repair provisions to allow repairs or replacements to be delayed until the next scheduled shutdown under certain circumstances (unless, for logistical reasons, repairs cannot be made until the second scheduled shutdown). This issue is ripe for judicial review and for a settlement resolution because the parties requested this regulatory change during the public comment period. *See UARG v. EPA*, 744 F.3d 741, 747 (D.C. Cir. 2014).

A. Certain Repairs Need to be Delayed to Ensure that Repairs can be Made Safely and Without Increasing Emissions or Jeopardizing Supply

GPA Midstream and INGAA anticipate that the vast majority of leaking components can be repaired or replaced without invoking the delay of repair provisions in 40 C.F.R. § 60.5397a(h)(2). At the same time, however, delay of repair provisions are necessary to ensure that pipelines can be operated safely and reliably transport natural gas from producers to processing plants and eventually to end-use consumers. Unduly restrictive delay of repair provisions can threaten this system and create compliance risks for operators. Revising the current obligations would help to reduce the risk of additional venting or flaring of natural gas from the production and gathering sectors, as well as potential natural gas supply disruptions.

The final delay of repair provisions state:

> If the repair or replacement is technically infeasible, would require a vent blowdown, a compressor station shutdown, a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit, the repair or replacement must be completed during the next compressor station shutdown, well shutdown, well shut-in, after an unscheduled, planned or emergency vent blowdown or within two years, whichever is earlier.

40 C.F.R. § 60.5397a(h)(2) (emphasis added).

B. Vent Blowdowns Should Not Be a Trigger for Repairs

GPA Midstream and INGAA believe that EPA should eliminate vent blowdowns entirely as a triggering event for repair or replacement of components on delay of repair lists. Standard pipeline operations require starting up or taking compressors offline as customer demand changes. When those units are taken offline, operators often need to blow them down for equipment safety purposes. However, under the current regulatory requirement, operators would not be allowed to bring the compressor back online if demand increased and the compressor was needed for supply purposes unless any previously identified leaks were repaired. As discussed further below, arrangements must be made in advance for adequate repair personnel, parts, and other logistical arrangements before making certain repairs. However, if for example, it will take several months to obtain a new valve to replace a leaking valve, a compressor that is taken offline would be precluded from starting back up for months until the replacement valve is delivered. Such a prolonged outage could cause natural gas supply problems.

C. Requiring Repair or Replacement of Leaking Components After Unscheduled and Emergency Vent Blowdowns or Compressor Station Shutdowns Is Unreasonable

Unscheduled and emergency vent blowdowns and compressor station shutdowns can be caused by a number of factors, including station upsets, lightning, power loss, floods, releases upstream or downstream, unplanned maintenance or repairs on a pipeline, fire, or instrumentation outages. Compressor station sites, particularly in the gathering sector, are typically remote, unmanned sites where routine operations can be monitored and controlled remotely. Under some circumstances, a compressor station in the gathering sector can be restarted remotely after an unscheduled or emergency vent blowdown with limited downtime. In other cases, personnel are dispatched to the compressor station with the goal of resuming operations as quickly as possible. In either event, it is imperative that downtime at the compressor station be limited to the shortest duration possible to prevent or minimize customer service disruptions.

Requiring repairs and replacement of leaking components after unscheduled and emergency vent blowdowns and compressor station shutdowns will likely increase rather than decrease net emissions. For example, if a compressor station in the gathering sector ceases operation due to an unscheduled or emergency shutdown, natural gas will continue to enter the gathering lines until production wells are shut in. Production wells cannot be shut in immediately, and there is a risk that a compressor station outage could cause emissions upstream if the pressurized natural gas must be vented or flared for safety reasons. While producers would likely shut in wells as soon as possible in response to an extended shutdown of a compressor station, compressor station shutdowns of even a few hours can produce vented or flared emissions that would dwarf those associated with leaking components on a delay of repair list. Under normal circumstances such emissions can be avoided entirely if there is no impediment to restarting the compressor station.

The requirement to repair or replace leaking components prior to resuming operations after a vent blowdown or an unscheduled shutdown could add days to the compressor station outage, even when parts are immediately available. Compressor station shutdowns may be extended if personnel need to travel to secondary locations to obtain replacement parts or other equipment to conduct repairs before traveling to the compressor station site. Further, compressor stations are sometimes located in remote, rural locations that are difficult or, in some circumstances unsafe, to access, particularly during inclement weather conditions. Or there might be additional logistical arrangements that the operator must make before the repair can be made. For example, it may be necessary to weld pipe to the valve ends and hydrotest the line before making the repair. Or heavy equipment might be needed to align the pipe during replacement or the pipe might need to be excavated before making the repair. In other situations, an entire crew of welders may be needed to weld the line simultaneously. Making these logistical arrangements and conducting this additional work requires time. In the interim, end users might not be receiving adequate supply[1] or, in certain situations, gas might be vented or flared upstream if the production wells cannot be

[1] *See* U.S. DOE, Assessment of the Adequacy of Natural Gas Pipeline Capacity in the Northeast United States (Nov. 2013), *available at* http://energy.gov/oe/articles/assessment-adequacy-natural-gas-pipeline-capacity-northeast-united-states-report-now; *see also* United States Fuel Resiliency, vol. III, prepared for

shut-in.[2] These upstream emissions and potential supply disruptions could be minimized or eliminated altogether if the repair and replacement obligations are only triggered by scheduled compressor station shutdowns.

This concern is exacerbated by the fact that requiring repair or replacement of leaking components will be even more problematic when replacement parts are not immediately available or if complicated repairs are required. Some replacement components for compressors stations sites, such as large valves, must be custom made and *can take several months to fabricate*. Thus, depending on when a triggering event occurs, it could take several months before a replacement part is available, even if it was ordered immediately after the leak was detected. The current obligations could leave a compressor station inoperable for months if an unplanned or emergency event occurred.

Prolonged outages would have severe impacts on the distribution and reliability of the pipeline network. GPA Midstream and INGAA do not believe this outcome was intended by EPA, but such a result might be triggered by complying with the final rule. Furthermore, repairs and replacement can be time consuming when heavy equipment and skilled laborers are required to install and test components prior to resuming operations. For example, in the transmission sector, it may take several days to replace and test large diameter valves even after the valve has been fabricated and delivered. In such circumstances, keeping a compressor station offline until the repair or replacement is made could significantly disrupt the supply of natural gas to end-use consumers.

D. Logistical Arrangements Need to Be Made Before Certain Repairs Can Be Made for Leaks Discovered Shortly Before a Scheduled Shutdown

The final rule inadvertently creates compliance concerns if a leak is discovered shortly before a scheduled shutdown. In some circumstances, owners and operators of compressor stations plan and make arrangements for scheduled shutdowns months in advance of the outage. This advance notice is required so that customers can make alternative arrangements for gas supply or schedule their own maintenance activities. If a leak is detected shortly before a scheduled shutdown is planned, the operator may need to make numerous logistical arrangements if the leak cannot easily be repaired. Although the operator would make every effort to repair the leak during the shutdown, it may be unable to do so on short notice. For example, if parts need to be fabricated, they might not be manufactured and delivered in time for the scheduled shutdown. To avoid a lengthy shutdown while the operator conducts logistical arrangements, the delay of repair provision should be modified to allow the operator to delay repair until the subsequent scheduled shutdown under these circumstances.

U.S. DOE (Sept. 2014), *available at* http://energy.gov/sites/prod/files/2015/04/f22/QER%20Analysis%20-%20United%20States%20Fuel%20Resiliency%20Volume%20III.pdf.

[2] These delays in resuming operations at compressor sites in the gathering sector will result in the venting of significant amounts of natural gas until wells can be shut in. In many cases, these emissions will dwarf the more limited emissions associated with leaks in fugitive emissions components that are subject to the quarterly monitoring requirements.

E. Other Regulations Do Not Require That Repairs Be Made Immediately During Emergency or Unscheduled Shutdowns

The repair and replacement requirements in NSPS OOOOa are more rigorous than the obligations for natural gas processing plants. Natural gas processing plants are larger, frequently manned facilities that are subject to leak detection monitoring and repair requirements under NSPS OOOO in 40 C.F.R. § 60.5400. The delay of repair provisions in those regulations require that leaking components must be repaired or replaced only after a process unit shutdown as defined in NSPS VVa.

NSPS Subpart VVa defines a process unit shutdown as follows:

> *a work practice or operational procedure that stops production from a process unit or part of a process unit during which it is technically feasible to clear process material from a process unit or part of a process unit consistent with safety constraints and during which repairs can be accomplished.*

40 C.F.R. § 60.481a. Subpart VVa also clarifies that shutdowns or partial unit shutdowns that are less than 24 hours in length are not considered a process unit shutdown for natural gas processing plants and thus do not trigger repair obligations for natural gas processing plants under Subpart OOOO. 40 C.F.R. § 60.5400(a). Moreover, Subpart VVa allows the delay of a repair beyond the next process unit shutdown if parts are unavailable and must be ordered. 40 C.F.R. § 60.482-9a(e). *See also* 48 Fed. Reg. 279-01 (Jan. 4. 1983), 1983 WL 125373 (acknowledging that "[i]n a few instances, replacement of the entire valve assembly would be required" and proposing to allow delay of repair beyond the next scheduled shutdown if the requisite valve assembly parts are not in stock). EPA should similarly ensure that the delay of repair obligations in NSPS OOOOa allow operators adequate time to order parts required to make repairs.